

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Kindly amend the claims as follows:

Claim 1. (Original) A method of providing hot back-up for a satellite communication satellite system comprising:

collocating two satellites; and

utilizing a complementary channel arrangement for the two satellites which facilitates full dual pole coverage continuity when one of the satellites fails.

Claim 2. (Cancelled) A system comprising:

a first satellite configured to include multi-spot beams having a first channel arrangement;

a second satellite, co-located with the first satellite, having a second arrangement complementary with the first channel arrangement.

Claim 3. (Cancelled) A method of operating a two-way communication satellite communicating comprising:

receiving Ka band frequency channels from Hub and converting the Ka band frequency channels to Ku band frequency channels for downlink directed messages to a plurality of terminals;

receiving the Ku band frequency channels from a plurality of user terminals and converting the Ku band frequency channels into Ka band frequency channels and outputting the Ka band channels to the Hub.

Claim 4. (Cancelled) An apparatus comprising:

a communication satellite comprising a first interface configured to communicate using Ka frequency band channels and a second interface configured to communicate using Ku frequency band channels;

a gateways configured to send and receive data to the communications satellite using the Ka frequency band channels; and

a plurality of user terminals configured to send and receive data to the communications satellite using Ku frequency band channels.

Claim 5. (Cancelled) An method of operating a network operations center to control a satellite to receive Ka band frequency channels from a Hub and convert the Ka band frequency channels to Ku band frequency channels for downlink directed messages to a plurality of user terminals, and to receive Ku band frequency channels from a plurality of user terminals to convert the Ku band frequency channels into Ka band frequency channels and output the Ka band channels to the Hub.

Claim 6. (Cancelled) A multi-mode communication satellite comprising a two antenna system and a switch configured to switch a plurality of transponders between a spot beam mode and a generic beam mode.

Claim 7. (Cancelled) The multi-mode communication satellite of claim 4 wherein the switch is configured to switch all of the transponders or a portion of the transponders.

Claim 8. (Cancelled) A satellite comprising:

a first antenna system having multiple spot beams;

a satellite control configured to control the first antenna system to switch transponders from one spot beam to another responsive to control channels.